Wilmington Police Department

Standard Operating Procedures
SOP - .04.13

S.A.B.L.E. - UAS

SOUTHEASTERN NORTH CAROLINA AIRBORNE LAW ENFORCEMENT - UNMANNED AIRCRAFT SYSTEM

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INTRODUCTION

This document provides a consolidation of information, procedures, rules and guidelines. It is the intent of this Standard Operating Procedures Manual (SOP) to provide the SABLE-UAS remote pilots with the safest, most efficient methods and procedures for the overall conduct of the unit's unmanned aircraft flight operations.

While this document strives to provide the best possible operating instructions under most conditions, it is not by itself a substitute for good, sound judgment. Emergencies, adverse weather, tactical considerations, terrain or other extenuating circumstances may require deviation from any procedure in the SOP. It has strived to complement existing Departmental Rules and Procedures, FAA regulations, and other pertinent information relating to the Units mission and flight operations.

1.1 Purpose

A. It is the policy of the Wilmington Police Department that duly trained and authorized agency personnel may deploy UAS (Unmanned Aircraft System) when such use is appropriate in the performance of their official duties, and where deployment and use, and the collection and use of any audio/video recordings or other data originating from or generated by the UAS, comport with the policy provisions provided herein and applicable law.

1.2 Policy

A. The UAS/Drone unit will provide support to local public safety operations and events deemed by the SABLE Executive Board representatives, their designee, or the SABLE UAS/Drone unit supervisor. Deployment and use of the Unmanned Aircraft System will only be conducted by duly trained and authorized members of the UAS/Drone unit in performance of their official duties.

B. The UAS/Drone Unit is comprised of members from the Wilmington Police Department, New Hanover County Sheriff's Office, Wilmington Fire Department, Leland Police Department, and Pender County Sheriff's Office. The agencies have a Memorandum of Understanding in place via the Executive Board.

1.3 Definitions

A. Above Ground Level (AGL): The distance between an object and the ground surface in feet.

B. Certificates of Waiver or Authorization (COA): An authorization issued by the FAA to a public operator for a specific UAS activity.

C. Digital Multimedia Evidence (DME): Digital recording of images, sounds, and associated data.

D. Federal Aviation Administration (FAA): Is the agency of the United States Department of Transportation responsible for the regulation and oversight of civil aviation within the U.S., as well as operation and development of the National Airspace System. Its primary mission is to ensure safety of civil aviation.

E. Remote Pilot in Command (RPIC): The person responsible for all flight activities during any given flight, also "Operator".

F. Visual Observer: The individual assigned to maintain line of sight and 360-degree hazard awareness around the UAS at all times and assist

the RPIC (Remote Pilot in Command) in carrying out all duties required for the safe operation of the UAS.

G. Part 107: An FAA endorsement allowing commercial or governmental use of UAS technology focusing on following a strict set of guidelines and procedures.

H. Sterile Communications: Communication is restricted with the UAS operator to only "task at hand conversation" to reduce confusion or distraction.

I. Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV): An aircraft that is intended to navigate in the air without an on-board pilot, "Drone".

J. Unmanned Aircraft System (UAS): A system that includes the necessary equipment, network, and personnel to control an unmanned aircraft, weighing less than 55 pounds, and are consistent with Federal Aviation Administration (FAA) regulations governing model aircraft.

K. UAS Flight Crewmember: A pilot, visual observer, payload/camera operator or other person assigned duties for a UAS for the purpose of flight or training exercise.

L. Unmanned Aircraft Pilot: A person exercising control over a UA/UAV/UAS during flight, "Pilot" or "Operator" or "PIC".

M. Southeastern North Carolina Airborne Law Enforcement (SABLE): A cooperative-effort air unit, which provides law enforcement services to, but not limited to, New Hanover County Sheriff's Office, Wilmington Police Department, Pender County Sheriff's Office, and the Leland Police Department.

N. Executive board: The board consists of the Chief/Sheriff, or their designee, from each participating agency in SABLE.

O. Low Altitude Authorization and Notification Capability (LAANC) – a collaboration between the FAA and private industry facilitating the sharing of airspace between two parties. The system allows drone pilots to request and receive authorization to fly in controlled airspace up to 400 feet.

1.4 Administration

A. All deployments of UAS must be specifically authorized by the Chief Executive of the respective participating agency or authorized supervisory personnel. These agencies have adopted the use of UAS

to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:

1. Situational Awareness: To assist decision makers (e.g., incident command staff; first responders; city, county, and state officials) in understanding the nature, scale, and scope of an incident—and for planning and coordinating an effective response.

2. Tactical Deployment: To support the tactical deployment of officers and equipment in emergency situations (e.g., incidents involving hostages and barricades, support for large-scale tactical operations, and other temporary perimeter security situations).

3. Visual Perspective: To provide an aerial visual perspective to assist officers in providing direction for crowd control, traffic incident management, special circumstances, fire support, and temporary perimeter security.

4. Scene Documentation: To document a crime scene, accident scene, or other major incident scene (e.g., disaster management, incident response, large-scale forensic scene investigation).

5. Search and Rescue: To assist missing person investigations, AMBER Alerts, Silver Alerts, and other search and rescue missions.

NOTE:

Warrantless Search: The UAS will not be operated in violation of North Carolina and/or US Code, statutes, or regulations, specifically, N.C.G.S. 15A-300.1. When a search warrant is required by law and no warrantless exception exists, flight for this purpose is prohibited unless an authorized search warrant is obtained.

1.5 Procedures for UAS Use

A. The agency will obtain and maintain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) prior to deploying or operating the UAS under the COA, and these authorizations, permits, and certificates shall be current and maintained by the UAS Supervisor.

B. UAS will only be operated by qualified personnel, both pilots and crew members, who have been trained in the operation of the equipment and procedures.

1. Qualified Operator:

a) Valid pilot FAA certificate of operation for UAS aircraft
b) Obtain Trust Permit
c) Completion of department approved training program

C. All flights will be approved by the UAS Supervisor and must be for a legitimate, defined, public safety mission, training, or demonstration purposes as listed in part Administration, A.1.

D. Visual Observer: The primary responsibility of the VO will be to ensure the UAS remains clear of any potential collision hazard, maintain an awareness of the position of the UAS, and effectively communicate with the pilot. It is suggested to complete an internal training class to become a qualified Visual Observer (VO) to assist the pilot during the operation of the UAS but not required.

E. The UAS-certified personnel shall inspect and test UAS equipment prior to each deployment to verify the proper functioning of all equipment and the airworthiness of the device.

F. The UAS equipment is the responsibility of the UAS member assigned to operate and will be used with reasonable care to ensure proper functioning. Equipment malfunctions shall be brought to the attention of the UAS Supervisor as soon as possible so that an appropriate repair can be made or a replacement unit can be procured.

G. The UAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment shall be disclosed in accordance with N.C.G.S. 132.1.4A.

H. All flights will be documented in an equipment logbook or database designed for that purpose, and all flight time shall be accurately recorded. Additionally, each deployment of the UAS shall include information regarding; the reason for the flight, the time, date, and location of the flight, Low Altitude Authorization and Notification Capability (LAANC), and a summary of the activities covered, actions taken, and outcomes from the deployment.

I. The UAS Supervisor will audit flight documentation at regular intervals.

J. Where there are specific and articulable grounds to believe that the UAS will collect evidence of criminal wrongdoing and/or if the UAS will be used in a manner that may intrude upon reasonable expectations of privacy, the agency will obtain a search warrant prior to conducting the flight.

1.6 Restrictions on Using the UAS

A. The UAS shall be deployed and used only to support official law enforcement and public safety missions.

B. The UAS shall not be operated in an unsafe manner or in violation of FAA rules.

1. Although operating under Policy and SOP conducting Public Use Operations, pilots are still responsible for all operations (14 CFR 91.3 - Responsibility and authority of the pilot in command).

C. Unit members that are not certified operators are forbidden from piloting any UAS operations.

1. The only exception is when a non-certified unit member is conducting internal training with an operator who possesses their remote pilot certification. A certified remote pilot operator can supervise an uncertified remote pilot providing that they maintain the ability to take immediate control of the UAS in the event of a safety hazard.

1.7 Prohibited Actions

A. Referencing N.C.G.S. 15A-300.1, “except as otherwise provided in this section, no person, entity, or operator shall use a UAS to do any of the following:

1. Conduct surveillance of:

a) A person or a dwelling occupied by a person and that dwelling's curtilage without the person's consent.

b) Private real property without the consent of the owner, easement holder, or lessee of the property.

c) Photograph an individual, without the individual's consent, for the purpose of publishing or otherwise publicly disseminating the photograph.

d) This subdivision shall not apply to newsgathering, newsworthy events, or events or places to which the general public is invited."

B. Law Enforcement Exceptions

1. The use of unmanned aircraft systems by law enforcement agencies of the State or a political subdivision of the State is not prohibited in the following instances:

a) To counter a high risk of a terrorist attack by a specific individual or organization if the United States Secretary of Homeland Security or the Secretary of the North Carolina Department of Public Safety determines that credible intelligence indicates that such a risk exists.

b) To conduct surveillance in an area that is within a law enforcement officer's plain view when the officer is in a location the officer has a legal right to be.

c) If the law enforcement agency first obtains a search warrant authorizing the use of an unmanned aircraft system.

d) If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent danger to life or serious damage to property, to forestall the imminent escape of a suspect or the destruction of evidence, to conduct pursuit of an escapee or suspect, or to facilitate the search for a missing person.

e) To photograph gatherings to which the general public is invited on public or private land.

C. Emergency Management Exception

1. An emergency management agency, as defined in N.C.G.S. 166A-19.3, may use unmanned aircraft systems for all functions and activities related to emergency management, including incident command, area reconnaissance, search and rescue, preliminary damage assessment, hazard risk management, and floodplain mapping.

1.8 Request Procedures

A. UAS personnel will be scheduled and listed on the weekly SABLE-UAS schedule. The schedule is available to all respective agencies and front desk personnel.

B. Requests can be made from any supervisor. The pilot will make the determination as to whether the flight should be initiated based on:

a) Request allowed by policy
b) Weather
c) Probability of success

1.9 Scene Operations

A. On Scene and Launch

1. The pilot will position the unit at a location that allows for the safe launch and recovery of the UAS.

2. The launch and recovery location of the UAS will be determined by the pilot and may vary from the incident commander's location if, at the discretion of the pilot, the mission can be better, or more safely, accomplished from an alternative launch and recovery location. The following specifics are to be taken into consideration:

a) Line of sight for operations
b) Obstructions
c) Wind / barriers

B. If members of the public are nearby, the pilot will establish a no entry zone radius. The no entry zone radius will be at least a 10-foot radius around the proposed takeoff and recovery point.

C. When operating at night, the UAS must have active visual anticollision lights operational to allow for the identification of the aircraft in the air.

D. A Visual Observer is required during the event if there is the potential for any collision hazard while operating the UAS.

E. An on-scene assisting officer may serve as a Visual Observer in a non-critical event (accident investigation, CSI support) if the following items are briefed prior:

1. Instructions on clearing the UAS takeoff area and defining what constitutes a safe distance from obstacles.
2. Sterile Communications during operations.

3. "STOP" as an immediate action statement in the event of confusion.

F. The UAS pilot will operate in support of the scene commander, or requested unit, however the pilot maintains the sole and exclusive responsibility of safely operating the UAS as determined by the UAS pilot.

1.10 Flight Operations

A. "Sterile communication" procedures must be observed by required members during critical phases of flight.

B. Non-essential personnel will remain outside of the 10-foot no entry radius during operations.

C. During UAS operations, the use of cell phones or other telephonic communication by the pilot/observer/essential personnel is restricted to the operational control of the UAS and any required communications with ATC.

D. The operating altitude will be dependent upon the UAS Operator's opinion and permission granted by LAANC on how to best safely accomplish the requested operation, but will not exceed 400ft above ground level, or, if abeam structures, 400 ft and including structure altitude.

E. The UAS Operator will be familiar with, and is directly responsible for, the request of, or coordination of a request, for any required waiver(s) to operate outside of the COA.

F. Weather parameters will be per the UAS operation manual and determined by FAA airport facility briefing; online, aviation weather app, or by recorded message.

G. A standard flight report will be completed documenting all required flight operations, to include any accident or emergency actions or conditions.

H. Any damage that occurs to a drone or other UAS equipment during an operation, training session or other UAS activity, shall be documented on a WPD-49 City of Wilmington Property Loss Report.

I. Any damage to the personal property of a citizen that occurs during any UAS operation, training session or other UAS activity, shall be documented on a WPD-66 Citizen Property Loss Report.

J. Any injury to a person that occurs during any UAS operation, training session or other UAS activity, shall be documented on a WPD Incident Report (Miscellaneous).

K. Any inflight or ground accident or emergency will immediately be reported to the UAS Supervisor.

L. Crash Notification Procedures for the UAS Supervisor when injury or damage to personal property occurs:

1. Notify the agency head.
2. Contact the FAA through FAA Drone Zone or the Flight Standards District Office (FSDO) at (336) 369-3900.
3. Complete all applicable WPD reports (WPD-49, WPD-66, Incident Report).
4. In compliance with 14 C.F.R. §107.9 (sUAS Part 107), the UAS Supervisor shall, no later than 10 calendar days after an operation, report to the FAA, any operation of a small unmanned aircraft involving:

a) Serious injury to any person or any loss of consciousness; or

b) Damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied:

i. The cost of repair (including materials and labor) does not exceed $500;or

ii. The fair market value of the property does not exceed $500 in the event of total loss.

1.11 Flight Approval

A. The weekly duty schedule will act as the approved operator schedule. All training/requests that fall under the auspices of this SOP will have approval upon listing.

B. The On-Call UAS Operator will be listed on SABLE-UAS weekly schedule and will be distributed accordingly.

C. Special Events/UAS demonstrations will be approved by the UAS Supervisor and will be listed on the SABLE-UAS flight schedule.

D. At no time will UAS operators launch outside of schedule unless a call out is requested by the specialized unit representative, Watch Commander, Chief, or Partner Agency representative.

1.12 Digital Multimedia Evidence (DME) Retention and Management

A. All DME shall be handled in accordance with existing departmental policy regarding data and record retention.

B. All DME shall be securely downloaded upon completion of each mission. The UAS certified operator will record the information for each file and shall include: the case number, date, time, location, any other mission identifiers, and the names of all UAS personnel involved in mission.

C. UAS members shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner UAS DME without prior authorization.

D. All access to UAS DME must be specifically authorized in accordance with department policy, and all access is to be audited to ensure that only authorized users are accessing the data for legitimate and authorized purposes.

E. Files should be securely stored in accordance with agency policy, state records retention laws, and retained no longer than necessary for the purposes of training or for use in an investigation or prosecution.

F. If a Wilmington Fire Department UAS operator assists WPD, or a partner agency, with a law enforcement operation, any and all data/evidence obtained by the WFD UAS will be transferred over to the investigating agency. Such data/evidence will be retained by the respective law enforcement agency pursuant to the agency's policy and state law.

1.13 UAS Supervision and Reporting

A. The UAS Supervisor shall manage all deployments and uses of UAS to ensure that individuals equipped with UAS devices utilize them in accordance with policy and procedures defined herein.

B. The UAS Supervisor will audit flight documentation at regular intervals. The results of the audit will be documented.

C. The UAS Supervisor will provide staff, or their designee, with the required information to publish an annual report documenting the agency's deployment and usage of UAS devices.

D. The UAS Supervisor will review and verify, on a yearly basis, that the unit's remote pilot's certification documents are valid and up to date.

E. The UAS Supervisor will conduct a unit equipment inspection quarterly.

F. The UAS Supervisor shall ensure that all reporting requirements, as described in section 1.10 of this SOP, are adhered to and completed.

1.14 UAS Training

A. Personnel who are assigned as UAS operators must complete an agency-approved training program to ensure proper use and operations. Additional training may be required at periodic intervals to ensure continued effective use and operation, proper calibration, and performance of the UAS equipment, as well as to incorporate changes, updates, or other revisions in policy, equipment or operational procedures.

B. All agency personnel with UAS responsibilities, shall also be trained in the local, state, and federal laws and regulations, as well as policies and procedures governing the deployment and use of UAS.

C. Training flights will be scheduled and performed at approved training locations and shall be documented the UAS Supervisor.

D. Training Responsibilities of the UAS Supervisor are as follows:

1. To ensure that all operators are FAA Certified for FAA Part 107 Operations and that operators maintain their biannual recertification requirements.

2. To provide yearly operator proficiency training for all members.

3. To provide updated training as required by Wilmington Police Department Policy, and/or partner agency policy.

4. To seek out and provide specialized training that may be required, or beneficial to UAS operations.

Attachment A
Member Agency Definition

The SABLE program is comprised of both Partner and Participating Agencies. The distinction between memberships is the level of involvement and operational investment.

Partner Agencies have dedicated an initial operating investment, defined by the original Executive Board Memorandum of Understanding (MOU), and maintain an annual budget commitment for aircraft operational responsibilities.

Participating Agencies dedicate a reduced initial operating investment and annual operational budget commitment.

The SABLE Executive Board is comprised of the Chief or Sheriff of Partner Agencies. Both Partner and Participating agencies have the same operational support, with the exception that Partner Agencies have the authority to provide UAS Operators for operations within their jurisdictions.

The Executive Board is comprised of:

Wilmington Police Department
Pender County Sheriff Office
Leland Police Department
New Hanover Sheriff Office

Attachment B

SABLE UAS Safety Management System

I. **Purpose:** A Safety Management System (SMS) is a formal top-down business approach to managing risk, which utilizes a systematic approach. SafetyDrone is the program that will be utilized for this purpose.

II. **Policy:** SafetyDrone is to be utilized and followed in conjunction with the SABLE-UAS SOP that is in place for UAS operations. SafetyDrone is a web-based program that is maintained on a secure cloud server. The user manual for SafetyDrone, called DroneLogBook, will be followed and can be located on the internet at:

(https://cdn.manula.com/user/12450/14133_21377_en_1594046163.pdf?v=20200706143620).

III. **Procedure:** SABLE-UAS team members will utilize SafetyDrone.

A. Fleet, Personnel Management, and Maintenance

1. Each member will be responsible for uploading documents such as licenses, training certificates, and any certifications.
2. All UAS and related equipment will be entered and traced in the system.
3. Flight hours and scheduled maintenance will be reported in the system.

B. Documentation and Reporting

1. SafetyDrone has the ability to provide detailed reports based on operators, flights, maintenance logs and more.
2. Each operator will log each flight, to include a descriptive narrative of each flight.

C. UAS Inspections and Maintenance

1. SafetyDrone will provide notification of inspections tasks.
2. SafetyDrone will also track lifespan and replacement history of each UAS and related equipment.

D. UAS Checklists and Risk Assessment

1. Safety Drone provides both a Pre-Flight and Post-Flight checklist to assist operators.
2. SafetyDrone provides a Risk Assessment to assist each operator for mitigating “fly-don’t fly” decisions.